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ABSTRACT

This report focuses on the fiscal year 1987 activities of the Education Information Center (EIC), a service operated by the Georgia Department of Education. Designed for use by top public school administrators and consultants, the purpose of the EIC was to help them save time and do a more effective job by expanding their knowledge about educational problems or issues they were facing on the job. It is noted that, in the period covered by this report (July 1986 through June 1987), the EIC responded to 1,172 requests from 411 individuals and--because requesters shared the information--reached more than 25,400 others. This report provides analyses of data on the groups served by the EIC during its final year, how the information provided was utilized, client evaluations of the research packets provided by the EIC, the value of the information to clients, staffing and service from 1983 through 1987, types of research packets and other information services provided, the sources and types of information included in research packets, average packet preparation time in minutes, and research packet preparation time by activity. In conclusion it is noted that, during the 15 years it was in operation, the EIC responded to 9,347 requests for information needed by administrators and consultants to handle their professional assignments and solve on-the-job problems more effectively, and that client reaction to EIC services was consistently extremely positive. The EIC was discontinued when the Georgia Department of Education was reorganized in May 1987. Nine tables display the data discussed in the report. (RP)

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GEORGIA DEPARTMENT OF EDUCATION

EDUCATION INFORMATION CENTER

OPERATIONS REPORT

FY 1987

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EXECUTIVE SUMMARY - FY 87 OPERATIONS
EDUCATION INFORMATION CENTER

Few educators are prepared to solve every problem they encounter on the job. Most need periodically to improve their knowledge of some aspect of their work in order to be more effective. However, those who do seek to update their professional education often risk information overload, a problem which is exacerbated by the limited amount of time they have for reading and assimilating new material.

The Education Information Center (EIC) was an information analysis service operated by the Georgia Department of Education for the benefit of top-level public school administrators and consultants. EIC staff, by reviewing the literature and judging the relevance and worth of available information in the client's problem area, and eliminating the redundant or less valuable, enabled the busy administrator or consultant to extend his/her understanding of the problem and keep up with new developments. By broadening clients' knowledge of research results, effective programs, current materials, and promising practices in education, the EIC sought to improve the professional information base which clients used to make decisions, solve problems, and carry out their assignments and responsibilities.

In preparing 182 Level 3 or 4 research packets during this period, the research staff reviewed 14,580 document resumes. A great many of these documents were also read in full, either as journal articles or reports on microfiche. In addition, potentially relevant materials from the EIC, Public Library Services, and Georgia State University collections were located and reviewed. Only about 12% of the more than 22,500 documents reviewed were judged to be of sufficient relevance and worth to be included in research packets.

Requesters of Level 1-5 packets estimated that, on the average, they saved 18 hours by having the EIC research a topic and select documents for them. Requesters of Basic Packets saved 12 hours. Thus, more than 16,700 hours (almost ten work years) of consultant and administrator time were saved as a result of EIC services. However, the EIC staff required only five hours of professional and clerical time, on the average, to prepare each packet (Levels 1-5).

From July 1986 through June 1987, the EIC responded to 708 requests for professional information on job-related problems or issues. In addition, there were 464 requests for Basic Information Packets. Requesters reported sharing the information they received with more than 25,000 others.

During FY 87, the EIC also provided 1,546 other information services, such as current awareness information, assisting visitors to use in-house materials, and referring callers to appropriate information sources.

Local superintendents and their central office staff were the most frequent users of EIC services. They made almost three times as many requests (704) in FY 87 as in FY 82, and nine times as many as in FY 77. Of the 186 local systems, 154 made at least one request to EIC during FY 87.

The average turnaround time on research packets--from request to mail-out--was 9 calendar days (Levels 1-5).

After reviewing the information they had received, most clients rated the topic coverage very good, the amount of information about right, and the packet arrival timely. Clients reported having used the information for planning a new program or program improvement more than for any other purpose. They also stated that access to EIC research services was very useful to their professional functioning.

In June 1987, the Georgia Department of Education was reorganized. Key EIC personnel were assigned to other functions and EIC services were withdrawn from local school systems and intermediate agencies.

EDUCATION INFORMATION CENTER
OPERATIONS REPORT
FY 1987

The Education Information Center (EIC) was an information analysis service operated by the Georgia Department of Education for top-level public school administrators and consultants. By providing information about current educational research, programs, materials, and practices, the Center broadened the knowledge base which professionals applied to job-related problems and decisions.

Entirely underwritten by DOE, the EIC received some 5,253 requests (Levels 1-7) for information on job-related problems over the last five years of its existence, and provided its clients with more than 9,500 other information services.

In the period covered by this report (July 1986-June 1987), the EIC responded to 1,172 requests from 411 individuals and--because requesters shared the information--reached more than 25,400 others.

GROUPS SERVED

The groups served by the EIC were top-level administrators and consultants in local systems, intermediate agencies, and the DOE. Over the years, growth in demand for information services was greatest at the local level. During its last five years, EIC use by local administrators and consultants almost tripled, from 237 requests in FY 82 to 704 in FY 87. Use of EIC by local systems was 9 times greater in FY 87 compared to FY 77. In FY 87, 154 of the 186 local systems requested at least one information packet from the EIC.

Education consultants made up the largest group that was eligible for EIC services; 92% of Level 1-5 requests come from this group. 571 LEA, RESA, GLRS, and DOE consultant requests for Level 1-5 packets were handled in FY 87. Top administrators accounted for the other 8%.

Table 1: Source of Requests (Levels 1-5 only)

50%	Local Systems	(306 requests)
26%	State Department of Education	(162 requests)
24%	RESA/GLRS/RAC/Psychoed Centers	(149 requests)

Approximately 5 percent of research requests came from first-time users.

INFORMATION UTILIZATION

Clients applied the information received in EIC research packets in many ways. The information was most often used in program planning or program improvement (129 requests). The next most frequent uses were for staff development or inservice (96 requests), making a decision on an educational issue (75), and making a presentation (52). Table 2 lists the major categories of use and their corresponding frequency.

Table 2: Research Packet Utilization

Use of Information	Number Reporting	Percent*
Program Planning/Program Improvement	129	36
Inservice/Staff Development	96	27
Decision-Making	75	21
Presentation	52	14
Proposal/Report	35	10
Evaluation	17	5
Other	17	5

*Percents do not add to 100 because some clients report more than one use.

RESEARCH PACKET EVALUATION BY CLIENTS

Clients who requested a Level 2, 3, 4, or 5 research packet received an evaluation form 30 days later. The return rate of 73% was very high for a mail-out questionnaire.

Client responses to some of the items on the evaluation form are shown in Table 3. In every instance, the typical response was very favorable, with most clients marking the optimum.

Most clients (84%) found it easy to explain their topic to the researcher taking their request. The majority rated topic coverage very good (72%) or good (21%); 94% rated the amount of information received about right. The material arrived in time for their purposes 98% of the time; the other 2% of packets were late but still useful. When clients were asked how useful the EIC was to their own professional functioning, replies averaged 4.9 on a 5-point scale. The great majority (88%) responded that it was very useful.

Table 3: Client Evaluation of Research Packets
(Levels 2-5, N=362)

Factor	Mean	Mode
-Ease of Specifying Topic	4.8	5 (easy, 84%)
-Topic Coverage	4.5	5 (very good, 72%)
-Amount of Information	2.0	2 (about right, 94%)
-Arrival Time	3.0	3 (in time, 98%)
-Usefulness of EIC Services to Their Professional Functioning	4.9	5 (very useful, 88%)

Summarizing their impression of the general usefulness or value of the information received, 61% replied that it provided new ideas, 51% found additional alternatives for decision-making, 38% increased their awareness of problems to be met, and 37% formulated new questions or avenues of inquiry. Table 4 summarizes all responses.

Table 4: Value of Information to Client

Percent	
61	Provided new ideas
51	Provided additional alternatives for decision-making
38	Increased awareness of problems to be met
37	Helped formulate new questions or avenues of inquiry
52	Increased awareness of scope of material available
45	Reinforced present thinking
4	Other
1	Was of little or no help

One of the best measures of client satisfaction was the extent to which they found the information worth sharing with others. During FY 87, recipients of Level 2-5 packets reported that they expected to share the information they had received with 29 others on the average. As this figure was derived from the responses of 362 clients, it is probably reliable for the group as a whole. Thus, more than 14,000 others shared information sent out in EIC research packets. In addition, Basic Packet requesters reported sharing the information with about 10,700 others, making more than 25,000 people who received the benefit of information provided by EIC.

Another important indicator of client satisfaction was the amount of time clients reported they had saved by using EIC services. The number of hours reported, averaged over 410 replies, was 18 hours per Level 1-5 packet. Basic Packet requesters saved 12 hours each. The total amount of client time saved by the EIC was more than 16,700 hours in all--nearly 10 administrator or consultant work years. This contrasts with the four professional work years plus two clerical work years required to operate the EIC in FY 87.

The hours reported saved contrasted sharply with the amount of staff time required to prepare a research packet, which averaged 5 hours per request. Unquestionably, the ready access to information which EIC staff members had, compared to that of most educators in rural areas, accounted for part of this difference, while EIC staff expertise in information retrieval and analysis probably made up the rest. EIC research services were cost-effective, if measured solely by the difference between the amount of client time reported saved and the amount of staff time required to prepare each packet. If it were also possible to assess the benefit derived by Georgia students from clients having applied the ideas they received, we would have an even better idea of the value of EIC cost-effectiveness.

Finally, 94% of clients indicated that the amount of information sent to them was "about right." As information overload can be a major problem for decision-makers, the EIC staff's culling of more than 85 percent of the documents reviewed would appear to have been of considerable assistance in the efficient use of the material.

STAFFING AND COST OF OPERATIONS

In FY 87, the Education Information Center was staffed by a research program director, a research unit coordinator, a senior research specialist, a research specialist, two quarter-time secretaries, and three half-time students. Despite the loss of two additional research specialist positions

between FY 82 and FY 86, the remaining staff, with a total of 46 years of EIC experience, were able to meet the undiminished demand for services, as seen in Table 5.

Table 5: Five Year Service and Staffing Summary

	FY83	FY84	FY85	FY86	FY87
Research Requests (Levels 2-5)	472	478	534	449	495
Updates (SDI)	N.A.	44	52	93	86
Basic Packets (Level 6)	594	208	388	277	464
Document Retrieval (Level 1)	120	151	111	110	122
Other Information Services	1541	1621	1944	1454	1546

Available Manpower in FTE Months

FY83	FY84	FY85	FY86	FY87
64	61	58	50.5	42

NOTE: Manpower includes librarians and one-half of director's time.

Costs, excluding space, were:

Personnel	$189,667
Operating Expenses	16,835
Computer Retrieval	13,521
Total	$220,023

OTHER SERVICES

In addition to research packets, the EIC provided several other types of information services: sending current awareness information (articles or items from current journals and newsletters) related to clients' job responsibilities; providing duplicates of ERIC microfiche in response to requests for specific documents; assisting department staff and others to use EIC in-house resources; directing ineligible requesters to another source; and referring "ready reference" questions to an appropriate person in the DOE or an outside agency.

There were 1,546 such services provided by the EIC staff during FY 87.

TYPES OF RESEARCH PACKETS

The EIC prepared research packets of varying levels of complexity, which have been categorized in seven levels for analytical purposes. All but Level 6 were individually tailored to the client's unique needs and circumstances.

Level 1	Specific document or author search
Level 2	Computer-generated, annotated bibliography of document resumes on the requested topic
Level 3	Computer-generated bibliography plus selected source documents
Level 4	Search-in-depth: retrieval, analysis and selection of the most relevant documents from all available sources
Level 5	Generation of original information, or synthesis of findings obtained through a Level 4 search
Level 6	Basic packet of information on a "hot topic"; prepared in advance; same packet sent to many clients
Level 7	Update: monthly computer printout of new ERIC documents in client's area of responsibility

Level 1 searches were the least complex of the EIC packets and involved locating and retrieving documents which the client specified.

For a Level 2 search, the client typically called and explained the educational problem or issue on which he/she needed more information. An EIC research specialist then analyzed the problem and computer-searched appropriate data bases. A bibliography of document resumes was developed on-line, then printed and mailed to EIC from the bibliographic retrieval service. After review, it was forwarded to the client.

A lengthier and more analytical process was necessitated by a Level 3 search. Level 3 packets included, besides a computer-generated bibliography of document resumes, selected source documents which the research specialist judged to be potentially helpful.

Level 4 searches were searches-in-depth, in which most available sources of information were explored. These could include computer searches of all relevant data bases, searches of cooperating libraries, such as Georgia State University, and consultations with experts and other information analysis centers. It also included reviewing the EIC vertical files and document collection. The researcher usually read and analyzed many documents before selecting and sending the ones that appeared to be of potentially greatest use.

The Level 5 search required developing original information, or writing a synthesis of knowledge obtained through a Level 4 search. There were only three of these during the period because of the amount of staff time required.

Figure 1 shows the distribution of requests over the four major search levels.

One of the accomodations that had to be made in FY 87 because of the reduction in staff was to increase the proportion of requests that were handled as Level 2 searches (less time consuming) and reduce the number of Level 3 and 4 searches.

Figure 1: Distribution of Search Requests Across Levels 1-4

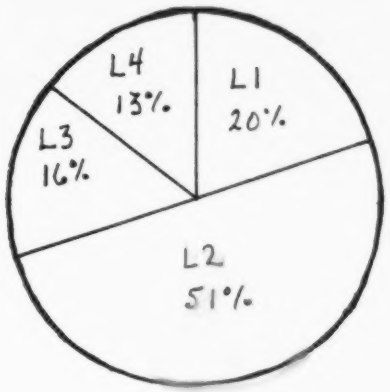

Table 6: Distribution of Search Requests Across All Levels (1-7)

Level	Number	Percent
1	123	10
2	314	27
3	101	9
4	81	7
5	3	0.3
6	464	40
7	86	7
Total	1172	100

RESEARCH PACKET CONTENTS

Most requests required the preparation of an individually-tailored information packet. Table 7 shows the various forms of documentation that were included in packets, the total number of each supplied, the average number per packet, and the proportion of packets that contained each form.

Table 7: Research Packet Contents (Levels 1-5)

Form of Information	Total Number Supplied	Average Number Per Packet	Proportion of Packets Containing (N=622)
Computer-generated doc. resumes	38,317	80	77%
Document reprints	2,425	9	43%
Documents on microfiche	1,151	6	32%
Document loans	137	2	12%
EIC selected bibliographies	168	1	27%
Consultant or site referrals	53	NA	9%

As seen in Table 7, few packets contained all forms of documentation. Only 9% included consultant or site referrals, while 43% contained one or more document reprints. If a packet did include document reprints, there were typically nine of them. Generalizing for Levels 1-5, the average packet contained 62 computer-generated document resumes, 2 documents on microfiche, and 4 document reprints.

PACKET PREPARATION TIME

Educators who need to update their knowledge often risk information overload, and the time they have for reading and assimilation is very limited. Since computer technology and large information data bases have made it possible to locate tens or even hundreds of documents on a topic, one of the most important functions of the EIC staff was to eliminate the irrelevant or less important ones. In preparing 182 Level 3 and 4 packets during FY 87, the staff reviewed 14,580 document resumes, a great many of which were also read in full. In addition, numerous potentially relevant documents from the EIC, Public Library Services, and Georgia State University collections were located and read. Only about 12% of the approximately 22,500 documents reviewed were deemed sufficiently worth clients' time to be included in their packets.

The average turnaround time, from request negotiation to packet mail-out, ranged from 6 days (Level 1) to 17 days (Level 4). Level 2 packets required 8 days to prepare, while Level 3 packets required 11. It should be pointed out, however, that the turnaround time on Levels 2, 3 and 4 packets included a 3-7 day wait for the computer printout to come by mail from California. The average turnaround time for Levels 1-5 was 9 days.

Table 8 shows the average amount of staff time required to locate information, analyze and select the most worthwhile materials, and prepare the packet for mailing. There were three major phases of packet preparation: location, review/selection, and final preparation. On the average (Levels 1-4), EIC staff spent 1 hour 8 minutes locating information, 1 hour 48 minutes reviewing it, and 1 hour 21 minutes doing the final packet preparation. Average total time required to prepare a packet was 4 hours 36 minutes. The figures in Table 8 account for both professional and clerical staff time.

Table 8: Average Packet Preparation Time in Minutes (Levels 1-4)

Process	Level	1	2	3	4	Overall
	n =	123	314	101	81	619
Negotiation of Question		5	10	10	11	9
Staffing		2	8	12	18	9
Location of Information		45	39	81	201	68
Review & Selection		2	18	174	530	108
Final Packet Preparation		66	29	145	226	81
Total Preparation Time		120	105	422	986	276
(In Hours)		2.0	1.8	7.0	16.4	4.6

EIC professional staff time requirements increased substantially as the packet's level of complexity increased. Ten times more professional staff time was needed to locate, read, analyze, and select documents for a Level 3 or 4 packet than for a Level 1 or 2.

Table 9 displays the amount of time spent on each step, averaged for Levels 1-5.

Table 9 - Research Packet Preparation Time by Activity (Levels 1-5)

Activity	Average Minutes	
INITIATION		18
Negotiation	9	
Staffing	9	
LOCATION		70
Strategy	14	
Online Bibliography	3	
Offline Bibliography	15	
P.L.S.	9	
G.S.U.	14	
Vertical File	5	
Document File	4	
Reference Tools	2	
Consultants	1	
Other	4	
REVIEW/ANALYSIS		108
FINAL PREPARATION		81
Cover Letter/-Notes/Bibliography	18	
Document Loan	1	
Duplicate Microfiche	11	
Xeroxing	10	
Final Review	8	
Typing	7	
Mail/Deliver/Call	6	
Paperwork	20	
TOTAL TIME		276
(In Hours)		4.6

SUMMARY

The Education Information Center was an information analysis service provided to top public school administrators and consultants by the Georgia Department of Education. Its purpose was to help them save time and do a more effective job by expanding their knowledge about educational problems or issues they were facing on the job.

Using a broad range of information resources--computerized data bases, books,

journal articles, microfiche files, and consultants--EIC staff answered 1,172 research requests from Georgia educators in FY 87.

Over the course of its existence, from September 1973 through June 1987, the Education Information Center responded to 9,347 requests for information needed by administrators and consultants in order to handle their professional assignments and solve on-the-job problems more effectively. Client reaction to EIC services was consistently extremely positive. They found EIC helped them increase their professional knowledge, acquire new ideas, consider alternative problem solutions, and improve the scope and quality of information on which to base their actions.

In May 1987, the Department of Education was reorganized. Key EIC personnel were assigned to other functions and all EIC services to school systems and intermediate agencies were withdrawn.

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